

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 04087346
PUBLICATION DATE : 19-03-92

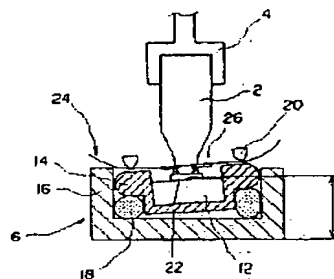
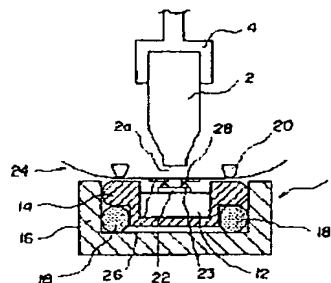
APPLICATION DATE : 30-07-90
APPLICATION NUMBER : 02202830

APPLICANT : NIPPON STEEL CORP;

INVENTOR : MARUYAMA TADAKATSU;

INT.CL. : H01L 21/60

TITLE : BONDING APPARATUS



ABSTRACT : PURPOSE: To enhance an operating efficiency, to surely execute a bonding operation and to increase yield by a method wherein a mounting stand is supported via an elastic member which maintains the parallelism between the pressurization face of a pressure means and the bonding face of an object to be pressed.

CONSTITUTION: When a pressurization head 4 is first lowered, the pressurization face 2a of a bonding tool 2 comes into contact with one part of an IC chip 22. When the pressurization head 4 is lowered further, a ring-shaped tube 18 corresponding to a part with which the bonding tool 2 has first come into contact is pressed and a part opposite to it is expanded. Since the inside of the ring-shaped tube 18 is filled with a noncompressive liquid, the volume of the tube as a whole is not changed. The height (h), from the bottom face of a support stand 16, of the center of gravity of the IC chip 22 is not changed. A cradle is turned by making use of the center of gravity of the IC chip 22 as the center. As a result, the cradle 14 changes its angle in such a way that the bonding face of the IC chip 22 follows the pressurization face 2a of the bonding tool 2. Thereby, the dislocation of the parallelism between the electrode 23 on the IC chip 22 and the lead 26 on a TAB tape 24 is compensated.

COPYRIGHT: (C)1992,JPO&Japio

BEST AVAILABLE COPY